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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,744	03/24/2004	Thomas Gerard Shannon	20,227	5864
23556	7590	11/24/2006		
KIMBERLY-CLARK WORLDWIDE, INC. 401 NORTH LAKE STREET NEENAH, WI 54956			EXAMINER COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER

1771

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/808,744

**Applicant(s)**

SHANNON, THOMAS GERARD

**Examiner**

Elizabeth M. Cole

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10, 17-21 and 28-43 is/are pending in the application.
- 4a) Of the above claim(s) 28-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10 and 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/15/06 has been entered.

Applicant's election without traverse of claims 1-5, 7-10, 17-21 in the reply filed on 9/14/06 is acknowledged.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-10, 17-21 are rejected under 35 U.S.C. 103(a) as obvious over JP 05-105705 as set forth in the previous action. With regard to the limitation that the nonwoven sheet contains an aqueous solution of a deliquescent material JP '705 teaches that it is known to apply the deliquescent salts without the post polymerizing step to fibrous supports and that when the post polymerizing step is omitted that the deliquescent salts tend to liquefy, (i.e., be present in solution). See paragraphs 0002-0004. Therefore, JP '705 teaches that deliquescent material can be present in solution but that if this is not desired that the post polymerization step can be employed to avoid

issues related to the wetness of the fibrous material. The omission of an element or step is obvious if the function of the element or step is not desired.

4. Claims 1-2, 4-5, 7-10, 17-19, 21 are rejected under 35 U.S.C. 103(a) as obvious over Taniguchi, U.S. Patent NO. 5,449,551. Taniguchi discloses a fibrous web such as paper or a nonwoven fabric to which is applied 1-300 wt% based on the weight of the fibrous web of a hygroscopic material. The hygroscopic materials include calcium chloride and sodium chloride. See abstract and col. 3, lines 4-8. The web comprising the hygroscopic material can be used to make a wet wipe or can be used to make a dry towel which can be used to dry the hands, (see examples), depending upon how much of the hygroscopic material is present. The hygroscopic material absorb moisture from the atmosphere and thus meet the limitation of the deliquescent material which is in solution due to absorbing water from the atmosphere. See col. 4, lines 30-61.

Taniguchi does not disclose the equilibrium moisture content, however, since the same materials are used in the same amounts as in the instant invention, it is reasonable to presume that the materials would function the same way. With regard to the dry bulk, while Taniguchi does not disclose the dry bulk of the nonwoven material, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected a material having a dry bulk through the process of routine experimentation in order to arrive at a web having the desired strength, absorbency, hand, cushioning and durability, since these properties would have been recognized as being directly related to the dry bulk of the web.

5. Claims 3 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi as applied to claims above, and further in view of JP 05-105705. Taniguchi teaches a material comprising a hygroscopic material as set forth above. Taniguchi differs from the claimed invention because Taniguchi does not teach employing lithium chloride and does not teach employ synthetic fibers, although Taniguchi does teach employing "nonwoven fabrics" in addition to tissues. JP '705 teaches that lithium chloride was recognized in the art as equivalent to sodium chloride as a hygroscopic material for use in forming nonwoven fabrics which comprise hygroscopic materials. JP '705 also teaches employing synthetic fabrics to form the nonwovens into which the hygroscopic materials are placed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed lithium chloride as the hygroscopic or deliquescent material in Taniguchi and to have employed synthetic fibers to make up the nonwoven of Taniguchi, motivated by the teaching of JP '705 that lithium chloride and synthetic fibers were recognized as equivalent to the sodium chloride and tissues employed in Taniguchi.

6. Applicant's arguments filed 5/15/06 have been fully considered but they are not persuasive.

7. The terminal disclaimer filed 5/15/06 is proper and has been recorded.

8. With regard to the art rejection, Applicant argues that the deliquescent material of JP '705 is not present in an aqueous solution. However, as set forth above, the background section of JP '705 teaches that it is known in the art to apply the deliquescent materials to fibrous substrates as taught in JP '705 without the post

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polymerization step. JP '705 teaches that without the post polymerization step the deliquescent material liquefies or is in a solution and that when it is desired that the deliquescent material not liquefy that the post polymerization step can be used.

Therefore, the rejection is maintained.

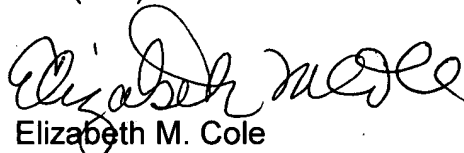
9. Applicant's amendment has overcome the 112 1<sup>st</sup> paragraph rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c